

MARYLAND RELAY
2003 ANNUAL SUMMARY OF CONSUMER COMPLAINTS
June 1, 2002 through May 31, 2003

As of June 9, 2003													2003				
Maryland													2002				
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	TOTAL				
VOICE	2	0	2	3	1	1	1	1	0	1	1	1	14				
TTY	11	7	8	8	3	2	5	4	2	1	1	3	55				
TOTAL	13	7	10	11	4	3	6	5	2	2	2	4	69				

As of June 9, 2003

Complaint Category	2002												2003					Total
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY						
Transparency			1	4	2			3			1			12				
Confidentiality						1		1						2				
Verbatim	2	1	1	1		2						1		8				
Typing Issues	3	4	6	2	1		4	1	2	1	1	3		28				
In Call Replacement														0				
Answer Performance	8	2	2	4	1		2							19				
Gender Accommodation														0				
Total	13	7	10	11	4	3	6	5	2	2	2	4		69				

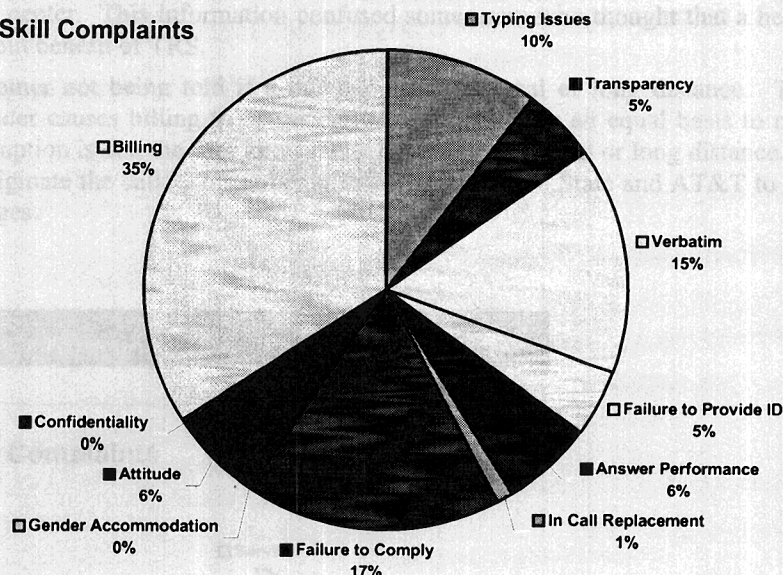
Attachment - Maryland Relay Summary Log & Customer Contact

June 1, 2002– May 31, 2003

The State of Maryland provides a comprehensive listing of complaints and all customer feedback. The categories tracked by the Tam office are as follows:

Operator Performance Complaints

Operator Skill Complaints

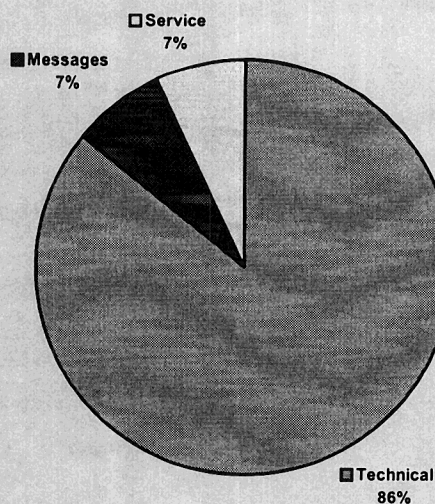


1. 21 - complaints concerned Answer Wait Time
2. 12 - complaints concerned General Service Concerns
3. 60 - complaints concerned Operator Not Following Customer/Profile Instructions or Keeping Customer informed.
4. 36 - complaints concerned Typing Issues
5. 17 - complaints concerned Operator Transparency
6. 53 - complaints concerned verbatim relaying of call to include complete information and accurate message.
7. 18 - complaints concerned Operator failure to provide Operator ID
8. 4 - complaints concerned In-Call Replacement of Operator
9. 21 - complaints concerned Operator Attitude
10. 1 - complaints concerned Confidentiality

11. 12 - complaints concerned Messages that are not provided in the same manner or with more words than in the past
12. 119- complaints concerned Other Problem Type Complaints dealing with a change in process from one provider to another:
- Billing for Long Distance calls that were not billed in the past. This problem is due to the more sophisticated technology of the current provider that allows calls to be billed in a functionally equivalent manner to the same call if dialed directly. Because the previous provider could not detect actual calls or directly hand them to the appropriate IXC for billing purposes, a radius of approximately 40 miles from call initiation was determined to be a local call with no charges.
 - Customers receive the Caller ID of the calling party instead of "Unavailable" or the number of the relay center. This information confused some users who thought that a hearing user was calling without benefit of TRS.
 - Customer not being told if a number dialed is local or long distance. The technology of the provider causes billing to be generated by the IXC on an equal basis to non-TRS calls and the assumption is that the user knows which numbers are local or long distance from the number used to originate the call. This is being investigated by the State and AT&T to decide possible future changes.

Technical Complaints

Technical Complaints



1. 146- complaints concerned
- the change in process for connecting to an operator
 - garbling of ASCII connections
 - connections and disconnects on IP Relay

As of June 2003

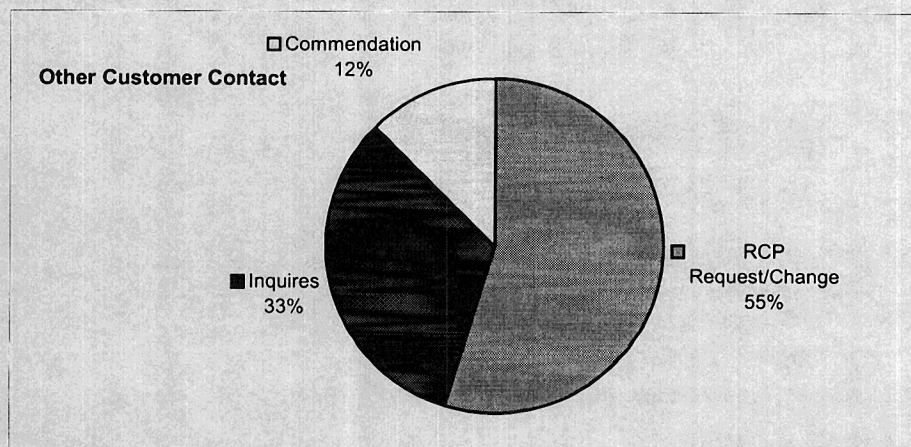
	2002							2003					
Customer Contact Category	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	TOTAL
Typing Issues	10	4	3	4	1	1	2	1	3	1	3	3	36
Transparency	2	0	2	2	1	1	2	2	1	3	1	0	17
Verbatim	0	1	3	0	4	2	3	0	0	0	0	1	53
Failure to Provide ID	1	0	1	3	4	1	3	1	0	0	1	1	16
Answer Performance	0	3	1	1	2	1	3	2	0	0	4	4	21
In Call Replacement	0	0	1	0	1	1	0	0	1	0	0	0	4
Failure to Comply	20	3	7	6	3	1	4	3	3	1	4	5	60
Gender Accommodation	0	0	0	0	0	0	0	0	0	0	0	0	0
Attitude	3	4	3	3	2	2	0	0	1	1	1	1	21
Confidentiality	0	0	0	0	0	0	0	1	0	0	0	0	1
RCP	33	19	14	102	38	11	20	7	12	8	4	10	278
Billing	38	23	14	5	7	6	2	3	7	6	2	6	119
Technical	47	21	20	7	5	4	7	2	3	11	10	9	146
Commendation	13	6	5	5	5	4	2	0	10	6	6	1	63
Messages	6	0	3	0	0	0	1	0	2	0	0	0	12
Inquires	16	24	13	23	11	4	12	3	21	3	21	17	168
Service	2	0	0	6	1	1	0	0	1	0	1	0	12
TOTAL	191	108	90	167	85	40	61	25	65	40	58	58	1027

- Maryland Relay not knowing what Long Distance Company they have selected with their LEC.

The Maryland Relay team, which includes the State of Maryland and AT&T Relay Center personnel, utilized the complaint information, daily operator monitoring, and customer feedback to determine its activities for refresher training.

All complaints filed for this 12-month period have been resolved. AT&T TRS and Maryland Relay made every effort to resolve all complaints within fifteen days after the last day of the month in which they were filed. Approximately ninety percent (90%) of the Service Type Complaints were resolved during the time that the complaint is filed with a supervisor. The remaining ten percent (10%) required additional follow-ups with either the operator and/or the customer. Additionally, AT&T and Maryland Relay established a policy to ask each customer who filed a complaint if they would like to provide their contact information and if they would like a call back. About ninety-five (95%) of the customers filing complaints did not wish to receive a call back. Instead, they want to be assured that the operator will be coached and receive any additional training that is necessary to improve the call processing.

Other Contact



Maryland is happy that through its outreach efforts the community's awareness of the ability to contact the Maryland Relay Center to provide feedback and obtain information is growing. Maryland's positive attitude toward consumer interaction has caused an increase in customer contact resulting in increasing customer satisfaction and better understanding.

- 168 - Inquiries for information regarding TRS, equipment distribution, and phone numbers for other services for the Deaf and Hard of Hearing.
- 63 - Commendations for Operators doing a great job.
- 278 - Relay Choice Profile - The State tracks the number of customers requesting Relay Profile Forms. Maryland Relay has made a concerted effort to increase the number of customer profiles because we feel that the use of profile information facilitates the user's calls and increases call efficiency.

MARYLAND RELAY
DEFINITIONS ON EACH COMPLAINT CATEGORY

Typing Issues – Spelling, Typing Speed, and Accuracy.

Transparency – Operator involved in consumer's call; expressing their opinions on the conversation or adding personal remarks.

Verbatim – Word for word not followed

Failure to Provide ID – Operator fails to mention their ID at the beginning of the call or end of the call.

Answer Performance – Delayed-responses after GA; Upfront Automation Problems such as waiting for operator after giving phone number.

In Call Replacement – Problems occur during the change of operators in middle of the call; Relief operator not picking up the conversation where the first operator left off. Operator switched before allotted time.

Failure to comply – Operator not following caller's special instructions or consumer's RCP (Relay Choice Profile); Hanging up on consumer without typing GA or SK after end of the call.

Gender Accommodation – Consumer's preference of male or female operator on a per call basis or from information in the customer's RCP is not followed.

Attitude – Operator not showing proper behavior or approach to the consumer.

Confidentiality – Customer feels that operator provided information to the other party without their consent. I.e. called party received the caller's phone number and felt that this was give by an operator, not by equipment.

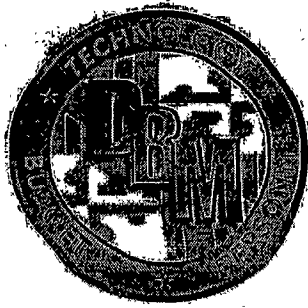
Relay Choice Profile (RCP) – Consumer request to set up, edit, or remove their profiles through Relay Customer Service.

Billing – Consumers' inquires and complaints about their choice of carriers; AT&T's new technology on detecting where the calls come from and determination on local or long distance toll; No longer using Sprint's way of charging (40 miles radius).

Technical – Problems on IP Relay; Voice Carry-Over; TTY garbled; UFA not responding to the call; No response after dialing 7-1-1.

Commendation – Praises for operators who have done an exemplary job processing a call.

Messages – Messages not being abbreviated such as MD rather than Maryland or (F) over Female; Unnecessary messages such as "Please hold and I will relay complete message."



Maryland Department of Budget & Management

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Office of Information Technology Telecommunications Access of Maryland

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Secretary

THOMAS K. LEE
Deputy Secretary

October 22, 2002

Ms. Jenifer Simpson
Consumer Inquiries & Complaints Division
Consumer & Governmental Affairs Bureau
FCC
445 Twelfth Street, S.W.
Washington, DC 20554

Reference: FCC No. 02-N82540, Mr. Kelby Brick, Esq.

Dear Ms. Simpson:

Thank you for allowing Maryland Relay to respond to the complaint registered with the FCC by Mr. Kelby Brick, Esq.

Mr. Brick's September 18, 2002 complaint stated:

"Called relay at approx. 405pm today, via TTY. Got connected, was told that all relay ops were busy and that I have to hold. I held for more than 35 seconds before a live person finally processed my call.

Too long!"

We are fully aware of the situation and have attempted to address the inequality that TRS users encounter by enforcing stricter standards than is required by the FCC. We addressed this issue in our Re-certification filed on October 1, 2002. See below:

Maryland Re-Certification Section-IV. B.4

Maryland meets these requirements. Maryland provides 24-hour service every day of the year that is backed up with redundancy of equipment and an uninterruptible power source in the center. Customers do not receive a busy signal due to loop trunk congestion.

It is important to note that there is seldom a problem where the customer receives a busy signal; the problem arises after reaching the provider switch and either receiving a continuous ring or waiting on hold for the next available operator due to all operators being busy.

Although this requirement strives to ensure that a TRS customer can reach an operator in an equivalent time period to that of a voice user placing a call, other State and FCC minimum requirements render this impossible.

Providers schedule operators to meet the FCC's 85/10 requirement or a stronger state ASA requirement. However, because ASA is a Daily Average and not a per call measurement equivalent to direct voice calls, some calls could ring for 10 minutes or longer if the overnight and slow call volumes are answered within a few seconds, thus still keeping the daily average within required limits.

If providers scheduled operators to meet an equivalent per call answer time rather than a daily average, the number of operators necessary would make the cost of TRS prohibitive.

If the FCC has suggestions on how TRS users can have more functionally equivalent answer times, we are, as always, open to dialogue between our office and the FCC.

One additional note, Mr. Brick and Pam Stewart of my office had a productive and mutually informative meeting after our Open House on September 21st to discuss this and other issues related to Relay.

Please share this complaint and Maryland Relay's resolution/comments with the appropriate policy personnel at the FCC.

If you have any additional questions, please do not hesitate to call me at 410-767-5891(V/TTY) or 1-800-552-7724 (V/TTY).

Sincerely,

Brenda Kelly-Frey, Director
MD Relay

Cc: Kelby Brick, Esq.
Missy Devlin, AT&T
Pam Stewart, DBM/TAM

APPENDIX – D

**QUALITY ASSURANCE TESTING AND
EVALUATION
BY INDEPENDENT EVALUATOR**

APPENDIX D1 - DECEMBER 2002

APPENDIX D2 - FEBRUARY 2003

APPENDIX D-1
DECEMBER 2002

Maryland Relay Call Monitoring Results Fourth Quarter 2002

Purpose of Study

At the request of Telecommunications Access of Maryland, TRS Quality Assurance completed 500 calls through Maryland Relay to measure the quality of service provided by AT&T's relay operators.

Report Summary

Criteria Measured	Results
Number of Calls Evaluated	500
Number of Operators Surveyed	155
Overall Typing Accuracy	77.1%
• Calls with 95% or higher	5.2%
Overall Verbatim	81.7%
• Calls with 95% or higher	18.4%
Overall Typing Speed (words per minute)	58.3 wpm
• Calls with 60 wpm or higher	52%
Calls at 95% Accuracy and 60 wpm	3.2%
Calls at 95% Verbatim and 60 wpm	15.1%
Operators provided ID number	55.2%
Operators asking for Carrier of Choice	7%
Operators providing ASL transliteration	67.6%
Calls with garbling	17
Calls encountering "All CAs Busy"	6

Methodology

Fifty-three scripted conversations were used to survey the operator's ability to relay a variety of business, technical and social calls.

- | | |
|----------------------------------|------------------------------|
| • Voice to TTY | Scripts 1 through 8 |
| • TTY to Voice | Scripts 9 through 41 |
| • TTY to Answering Machine | Scripts 42,43,44,45,50,51,52 |
| • TTY to Voice Processing System | Scripts 46,47,48,49,53 |

Testing was conducted on thirty-four days between October 12th and December 14, 2002. Calls were placed a various times during the day and evening to reach the largest possible sampling of operators.

A tape recorder was used to capture the voice caller and operator's conversation and a TTY printout was used to capture the TTY caller and relay operators typed conversation.

Continued on next page

Each call was evaluated for overall typing accuracy, percent verbatim, typing speed and adherence to relay procedures specified in this document. A spreadsheet with individual call results may be found in a separate file provided with this report.

**Overall
Typing
Accuracy**

The standard used to determine typing accuracy is based on the total number of words spoken by the voice caller and any conversation between the operator and the voice person when the TTY user is on the line. It includes all misspelled words, omitted or substituted words and abbreviations used by the operator not introduced by the TTY user. It does not include errors corrected by the operator when "xx" or "xxx" was used to correct an error.

The overall typing accuracy for all operators surveyed was 77.1%. The following is a summary of the accuracy results:

- 0 calls with 100% accuracy
- 26 calls (5.2%) with 99.9% to 95% accuracy
- 166 calls (33.2%) with 94.9% to 85% accuracy
- 129 calls (25.8%) with 84.9% to 75% accuracy
- 92 calls (18.4%) with 74.0% to 65% accuracy
- 48 calls (9.6%) with 64.9% to 55% accuracy
- 20 calls (4%) with 54.9% to 45% accuracy
- 10 calls (2%) with 44.9% to 35% accuracy
- 4 calls (.8%) with 34.9% to 25% accuracy
- 3 calls (.6%) with 34.9% to 15% accuracy
- 2 calls (.4%) with 14.9% to 5 % accuracy

**Overall
Verbatim**

Verbatim includes all information spoken without eliminating, re-phrasing or paraphrasing that information.

Unlike the overall accuracy rating, verbatim does not include an operator's spelling errors with the following exceptions:

- Misspelled words not readily decipherable
- Misspellings that correctly spell a different word

The overall verbatim for the test period was 81.7%. Operators met or exceeded the 95% verbatim requirement on 92 calls (18.4%). The following is a summary of the results:

Continued on the next page

-
- 3 calls (.6%) with 100% verbatim
 - 89 calls (17.8%) with 99.9% to 95% verbatim
 - 174 calls (34.8%) with 94.9% to 85% verbatim
 - 95 calls (19%) with 84.9% to 75% verbatim
 - 76 calls (15.2%) with 74.0% to 65% verbatim
 - 36 calls (7.2%) with 64.9% to 55% verbatim
 - 12 calls (2.4%) with 54.9% to 45% verbatim
 - 9 calls (1.8%) with 44.9% to 35% verbatim
 - 1 call (.2%) with 34.9% to 25% verbatim
 - 3 calls (.6%) with 34.9% to 15% verbatim
 - 2 calls (.4%) with 14.9% to 5 % verbatim
-

Overall Typing Speed

Typing speed is determined by timing designated segments on live calls. The timing is based on the start of the voiced segment until the operator stops typing. If the evaluator cannot determine the end of typing, the call cannot be used for this measurement. **It should be noted that this is not a precise measurement.**

Typing Speed is calculated by (1) Total Number of Keystrokes and (2) Total Amount of Time (minutes and seconds). The formula used to calculate words per minute is five (5) keystrokes (four alphanumeric characters plus one space) per "word".

TTY users observed operators using the backspace key to correct typing errors. These keystrokes cannot be captured; therefore, those operators' typing speed may be compromised for not following proper procedure for error correction.

Operator typing speed was successfully measured on 252 calls. Fifty-two percent of the operators met or exceeded the 60 words per minute requirement. The following is a summary of measured typing speed:

- 2 calls (.8%) above 100 words per minute
 - 2 calls (.8%) with 99.9 to 90 words per minute
 - 9 calls (3.6%) with 89.9 to 80 words per minute
 - 36 calls (14.3%) with 79.9 to 70 words per minute
 - 82 calls (32.5%) with 69.9 to 60 words per minute
 - 76 calls (30.2%) with 59.9 to 50 words per minute
 - 35 calls (13.9%) with 49.9 to 40 words per minute
 - 7 calls (2.8%) with 39.9 to 30 words per minute
 - 3 calls (1.1%) with 29.9 to 20 words per minute
-

**Speed and
Accuracy Met**

Operators met the requirement of 60 words per minute with 95% accuracy on eight out of 252 calls or 3.2%.

**Speed and
Verbatim Met**

Operators met the requirement of 60 words per minute with 95% verbatim on 38 out of 252 calls or 15.1%.

**Operators
providing ID
Number**

Operators are required to provide their operator number at the beginning and end of a call to the voice and TTY relay users. This requirement was satisfied on 276 calls.

On six voice-originating calls, the operator failed to provide his or her operator number at any point during the call. On one of these calls, the TTY user asked if the voice person was using a TTY. This was not voiced to the caller, instead the operator responded with "THRU RELAY"

The remaining 224 calls, operators failed to provide their number at the end of the call. On calls where the voice person stayed on the line for an acknowledgement, most operators signed off with, "Thank you, Bye."

Call monitors are required to track operator numbers to make sure the same operator does not handle any script more than once. For this reason AT&T's dial through system could not be used for these calls. Evaluators noted inconsistencies in the operator identification. On TTY originating calls, operators answered the call with "CA xxxx (F) or (M), then asked caller for the number to dial. At the end of the call, (OPR # xxxx (F T) or (M T). On voicing originating calls, "MD RELAY OPR XXX F T or M T is used for operator identification. Operators did not inform the voice person of their trainee designation.

**Carrier of
Choice**

Operators are required to ask callers for the his or her carrier of choice (COC) for every call if the information is not automatically available through the User Preference Database or offered directly by the inbound caller at the time of the call for any outbound long distance or toll call.

Forty-three long distance calls were placed to points outside the state. Operators asked for the caller's COC on three calls or 7% of the time.

**Operators
providing ASL
transliteration**

Seven scripts containing ASL gloss were used to test the operator's ability to make grammatically changes to the TTY user's typed message. Operators were rated as "Atttempt" when the operator demonstrated an effort to make grammatically corrections, and "No" when no changes were made.

Operators successfully provided transliteration or attempted to make the TTY user's typed message grammatically correct on 50 out of 74 calls or 67.6% of the time.

**Calls with
Garbling**

TTY users experienced garbling on 17 calls. These calls are identified on the summary spreadsheet with the date shown in bold.

All CAs Busy

Callers reached the "All CA's Busy" message on six calls. These calls are identified on the summary spreadsheet with the script number shown in bold

**Relay
Explanation**

Operators did not ask the voice person if he or she was familiar with relay. If the voice person seemed confused or asked the operator what was going on, the operator offered an explanation. A standard explanation was not always given. Some examples of ad-lib explanations include:

- "Have you ever had a relay call Wanda? The other person's deaf. You understand about calling the relay, right?"
 - "The person on the line may have a hearing or speech loss and we say may because that may not be the case, but they use the Maryland relay to contact you. Anything they want to tell you they will type. I will read it to you and anything you say will be typed back to our customer."
 - "She's umm, (name) is either hearing or speech impaired so this is her way of communicating. She types and then when she's typing, I voice to you and then what you say back, I type to her."
 - "The customer calling you has a hearing or speech problem."
-

**Use of Third
Person**

Many of the call scripts included the standard telephone user speaking to the TTY user in the third person. Evaluators noted 30 calls in which the operator changed third person to first. Every word changed impacts the operator's accuracy and verbatim scores.

**Operator
Conversations
with users**

Operators engaged in side conversations with the standard telephone users. The following are examples of these conversations:

Vce: This is David

Opr: This is MD Relay Opr # with a call. How are you David?

Vce: Fine

Opr: It's a wonderful Saturday day morning

Voice: Thank you for calling (Business Name)

Opr: You know, to be honest, I thought you were a recording at first. You know how businesses have the announcement before the options.....

Opr: All right dear. Thank you and have a good weekend.

On another call, the operators asked the voice user several questions while the TTY user was typing:

Opr: How many computers can you have hooked up to the DSL?

Vce: I don't think there's a limit. You mean how many all together?

Opr: Yes

Vce: I'm not sure. I don't think there's a limit as long as you've got a hub and network card.

Vce:There's also a small bathroom with a shower off the kitchen ...

Opr: Oh, how nice.

Later in the same call

Opr: I never knew there were condos that big. It sounds wonderful...

Vce: ... can I have your name again?

TTY: (Gave name)

Opr: That could be a male or female. I'm not really sure. Geez, it's one of those names. They didn't give me any indication. Guess we'll just have to say ok.

Vce: Okay (name)...

Opr: Good thinking!

Vce: Gentle Dental. This is Michelle.

(Opr announced relay, then while the TTY caller was typing:

Opr: How gentle is this dentist?

Vce: Excuse me?

Opr: How gentle is he? Is he gentle?

Vce: Oh yes. Just like the advertisement

Opr: I'm scared to go to the dentist. They have to put me to sleep. Literally

**Operator
Participation
in Calls**

The following are examples of operators becoming active participants in a call

Vce: It should be shipped to you in 10 to 15 days if not sooner....

Opr: Is that business days or regular day?

Vce: Blue Cross has not paid it yet.

Opr: Okay when you said Blue Cross has not paid it yet, was that a statement or a question?

Vce: Statement

Opr: Okay. I just wanted to make sure.

Vce: I need Alan's last name.

Opr: Her husband's name is Wallis

Vce: Your address is 1624 Hull Street?

Opr typed: YOUR ADDRESS IS 1624 HALL ST Q

TTY: NOT HALL HULL

Opr: Oh I'm sorry this was my mistake I mixed that up

TTY: HELLO THIS IS RON MY TWO THINGS ARE NOT WORKING NEED TO KNOW ESTIMATED COST FOR REPAIRS THEY ARE TV AND VCR GA

The operator voiced the TTY users question, then said to the voice

Opr: How can you possibility tell her if you don't know what's wrong? Well, what would you like to answer?

TTY: GRRR I HAVE TO WORK AT 11.....

Opr: (Laughing) Sorry, I don't mean to laugh, but you'll understand when I read what she had typed. She starts off with Grrrr.

Later in the same call

Opr: I didn't mean to offend you when I laughed at that. It was just her response was cute and comical.

TTY: HE NEEDS THE TERP SHERRI TO BE THERE ...

Opr: I think they are trying to say syrup, but they came up with terp ... Sherri. Oh! The interpreter Sherri.

TTY:THEY HAVE TO ACCEPT IT ..

Opr: They have to accept it. (operator speaking under her breath added: Yeah? They don't either.)

Continued on next page

Vce: Thank you for calling Chadwick's. How may I help you?

Opr typed: HELLO? GA

TTY: IS THIS CHADWICKS Q GA

Opr Typed: YES GA

Another script had the voice caller asking the TTY user how to contact her through relay. Both relay users are still connected. The following are examples of how the operator handled this call.

Vce: Okay. And as soon as something comes up, I'll give you a call. So let me make sure I have this right. I call the relay service first, that's 711 and then I call your number or do they call your number for me?

Opr 1Typed : OKAY AND AS SOON AS SOMETHING COMES UP I'LL GIVE YOU A CALL GA

Opr: They call the number for you. Just give the operator the number when they come on the line.

Opr 2Typed : OK AS SOON AS SOMETHING COMES UP ILL GIVE YOU A CALL LET ME MAKE SURE I HAVE IT RIGHT CALL THE RELAY SERVICE FIRST AT 711 GA

Opr: First the relay at 711 and ask the relay operator for my home number.

Opr 3Typed : OK AND AS SOON AS SOME THING COMES UP I LL GIVVE YOU A CALL OK GA

Opr: You call 711 and then you give them my number and then they will call me.

Opr 4Typed : OK AS SOON AS SOMETHING COMES UP I WILL GIVE YOU A CALL OK GA TO SK

Opr: You dial 711 first

Vce: Ok. I call the relay service first. 711.

Opr: The operafor comes on and you give the number to them.

Vce: Alright? Then I call the number?

Opr: Yep

Vce: All right. Thanks a lot.

**Answering
Machine Calls**

Operators were able to process answering machine calls with few problems. The answering machine message was typed to the TTY caller followed in most cases with "Would you like to leave a message?" Operators kept the caller informed of the call status by using macro keys (HOLD WHILE I LV MSG) and (MESSAGE HAS BEEN LEFT).

Only one operator failed to relay the answering machine message to the caller.

Opr: (RECORDED MESSAGE) DO YOU WANT TO LEAVE A MESSAGE GA
TTY: OPR IS THAT MARIE S ANS MACHINE Q I WANT TO MAKE SURE I LEFT TO RIGHT PH NBR GA

Opr: O C UYES IT IS ILL CALL BACK TO MAKE SURE FOR YOU SO THAT YOU WILL BE CERTAIN OK GA

TTY: YES PLS GA

OPR: ...DIALING .. YES ITS MARIE GA

**Voice
Retrieval**

TTY callers experienced long waits while some operators attempted to dial into voice processing systems. Other operators were not sure how to process the call and would tell the caller they could not access the system. Here are three examples:

TTY: ACCESS NBR FOR VOICE MAIL 410 988 9997 PRESS * MAILBOX NBR (NBR) PASSWORD (NBR) # (POUND) GA

Opr 1: THANK YOU DIALING ... RINGING 1... 2... 3... 4... 5....
(LONG PAUSE)

TTY: HELLO Q GA

Opr 1: IT WIVD NOT ACCEPT (PASSWORD) GA

TTY: DID U PRESS * AFTER THE LINE ANSWERED Q GA

Opr1: YES I DID # GA

TTY: DID YOU PRESS * AFTER THE LINE ANSWERED Q GA

Opr1: YES GA THANK YOU DIALING ... DO YOU WANT TO DAIL 410 988 OR (MAILBOX NBR) GA

TTY: YOU FIRST DIAL ACCESS NBR 410 988 9997 THEN PRESS * THEN THE MAILBOX NBR IS (NBR) GA

Opr1: THAT IS WHAT WAS WRONG THE NUMBER CAME OVER TO ME DIALING (MAILBOX) FIRST THANK YOU DIALING....

Opr2: THANK YOU DIALING ... DIALING ... RINGING 1... 2... 3.. 4... (ONE MOMENT PLS) (OPR HERE HOW DO I CHECK THE VOICE MAIL WHEN IT COMES ON Q GA)

TTY: RELAY THE MSGS THAT WAS LEFT GA

Opr2: (OPR HERE AN ANSWERING MACHINE CAME ON DO YOU WANT TO CALL (MAILBOX #) GA

TTY: (REPEATED INSTRUCTIONS)

Continued on next page

TTY: PLS CK MY VOICE MAIL 410 988 9997 NBR (MAILBOX NBR)
PASSWORD (NBR) GA

Opr3: THANK YOU .. DIALING .. THANK YOU .. DIALING .. THANK YOU ..
DIALING ..

TTY: HELLO Q WHAT IS GOING ON Q GA

Opr3: IT WASS RINGING AND THEM BUSY ... REDAILED .. THANK YOU ..
DIALED .. THANK YOU ... DIALING .. FINALLY .. ITS TELL MY
(PASSWORD) IS NOT A VALID NUMBER GA

TTY: OK I WILL FIGURE IT OUT THANKS BYE BYE SK

OPR3: I AM SORRY I DID IT TWICE I DON'T KNOW WHAT COULD BE
WRONG I DIALED (ACCESS NBR) AND PERHAPS I SHOULD HIT STAR
FIRST... COULD THAT BE IT Q GA

TTY: WHO KNOWS DIDN'T THE RECORDING GIVE YOU INSTRUCTIONS Q
GA

Opr3: IT SAID IF YOU ARE AT YOUR MAILBOX PHON HIT STAR .. I CAN
TRY THAT .. ALL THESE SERVICES ARE DIFFER SOMEWHAT I ASSUMED
BECAUSE THE TWO NUMBERS DIFFERED WE ONLY HIT THE CODE.. I YOU
HAE A MINUTE I CAN TRY THAT FOR YOU Q GA

TTY: OK PLS FOLLOW INSTRUCTIONS GA

Opr3: THANK YOU .. DIALING... SAME THING SAYS IT IS NOT A VALID
MAILBOX NUMBER SORRY

APPENDIX D-2
FEBRUARY 2003

Maryland Relay Call Monitoring Results First Quarter 2003

Purpose of Study

At the request of Telecommunications Access of Maryland, TRS Quality Assurance completed 502 calls through Maryland Relay to measure the quality of service provided by AT&T's relay operators.

Report Summary

<i>Criteria Measured</i>	Current Results	<i>Previous Results</i>
Number of Calls Evaluated	502	
Number of Operators Surveyed	165	155
Overall Typing Accuracy	83%	77.1%
• Calls with 95% or higher	12.4%	5.2%
Overall Verbatim	87.9%	81.7%
• Calls with 95% or higher	32.9%	18.4%
Overall Typing Speed (words per minute)	61.2 wpm	58.3wpm
• Calls with 60 wpm or higher	59.2%	52%
Calls at 95% Accuracy and 60 wpm	9.0%	3.2%
Calls at 95% Verbatim and 60 wpm	23.2%	15.1%
Operators provided ID number	74.3%	55.2%
Operators providing ASL transliteration	76.8%	67.6%
Calls with garbling	21	17
Calls encountering "All Operators Busy"	25	6

Methodology

Fifty-one scripted conversations were used to survey the operator's ability to relay a variety of business, technical and social calls.

- | | |
|----------------------------------|-----------------------|
| • Voice to TTY | Scripts 1 through 9 |
| • TTY to Voice | Scripts 10 through 43 |
| • TTY to Answering Machine | Scripts 44,45,46,47 |
| • TTY to Voice Processing System | Scripts 48,49,50,51 |

Testing was conducted on thirty-three days between February 10th and March 15, 2003. Calls were placed a various times during the day and evening to reach the largest possible sampling of operators.

A tape recorder was used to capture the voice caller and operator's conversation and a TTY printout was used to capture the TTY caller and relay operators typed conversation.

**Typing
Accuracy**

The overall typing accuracy for all operators surveyed was 83%. This represents an improvement over the previous test period of 7.7%.

The majority of operators asked for the spelling of all proper names, including common names such as Sue, Susan and Karen. If the operator asked the voice person to spell a name during call and did not indicate this to the TTY caller, (D I A G L E or (ASKING FOR SPELLING), the name was scored as an accuracy error. If the operator verified the spelling, i.e. is that Cathy with a "C", no error was charged. The following is a summary of the accuracy results:

- 5 calls (1%) with 100% accuracy
 - 57 calls (11.3%) with 99.9% to 95% accuracy
 - 206 calls (41%) with 94.9% to 85% accuracy
 - 145 calls (28.9%) with 84.9% to 75% accuracy
 - 44 calls (8.8%) with 74.0% to 65% accuracy
 - 26 calls (5.2%) with 64.9% to 55% accuracy
 - 9 calls (1.8%) with 54.9% to 45% accuracy
 - 4 calls (.8%) with 44.9% to 35% accuracy
 - 3 calls (.6%) with 34.9% to 25% accuracy
 - 2 calls (.4%) with 34.9% to 15% accuracy
 - 1 call (.2%) with 5% to 0 % accuracy
-

**Overall
Verbatim**

The overall verbatim for the test period was 87.9%. This represents an improvement over the previous test period of 7.6% Operators met or exceeded the 95% verbatim requirement on 165 calls (32.9%). The following is a summary of the results:

- 35 calls (7%) with 100% verbatim
 - 130 calls (25.9%) with 99.9% to 95% verbatim
 - 199 calls (39.6%) with 94.9% to 85% verbatim
 - 78 calls (15.5%) with 84.9% to 75% verbatim
 - 34 calls (6.8%) with 74.0% to 65% verbatim
 - 15 calls (3%) with 64.9% to 55% verbatim
 - 3 calls (.6%) with 54.9% to 45% verbatim
 - 2 calls (.4%) with 44.9% to 35% verbatim
 - 3 calls (.6%) with 34.9% to 25% verbatim
 - 2 calls (.4%) with 34.9% to 15% verbatim
 - 1 call (.2%) with 4.9% to 0 % verbatim
-

**Overall
Typing Speed**

Typing speed is determined by timing designated segments on live calls. The timing is based on the start of the voiced segment until the operator stops typing. If the evaluator cannot determine the end of typing, the call cannot be used for this measurement. Typing speed was measured on 267 out of a possible 417 calls. The average words per minute (wpm) was 61.2. Operators met or exceeded the 60 wpm on 158 calls (59.2%). The following is a summary of measured typing speed:

- 2 calls (.8%) above 100 words per minute
 - 3 calls (1.1%) with 99.9 to 90 words per minute
 - 17 calls (6.4%) with 89.9 to 80 words per minute
 - 46 calls (17.2%) with 79.9 to 70 words per minute
 - 90 calls (33.7%) with 69.9 to 60 words per minute
 - 70 calls (26.2%) with 59.9 to 50 words per minute
 - 29 calls (10.9%) with 49.9 to 40 words per minute
 - 10 calls (3.7%) with 39.9 to 30 words per minute
-

**Speed and
Accuracy Met**

Operators met the requirement of 60 words per minute with 95% accuracy on 24 out of 267 calls or 9% of the calls.

**Speed and
Verbatim Met**

Operators met the requirement of 60 words per minute with 95% verbatim on 62 out of 267 calls or 23.2% of the calls.

**Operators
providing ID
Number**

Operators are required to provide their operator number at the beginning and end of a call to the voice and TTY relay users. This requirement was satisfied on 374 calls.

- No operator number provided to either person on 1 call
 - No operator number to TTY on 4 calls
 - No operator number at the beginning to the TTY on 5 calls
 - No operator number at the beginning to TTY and end to Voice on 1 call
 - No operator number to TTY and at the end of the call to voice on 1 call
 - No operator number at the end of the call to the TTY on 46 calls
 - No operator number at the end of the call to the voice on 63 calls
 - No operator number at the end of the call to either person on 7 calls
-

Continued on next page

There appears to be no standard announcement to the TTY user on voice to TTY calls. The following announcements were given on this type of call:

- MD RELAY , OPR XXXX TF (55 calls)
 - MARYLAND RELAY, CA XXXX (9 calls)
 - OPR XXXX TF (12 calls)
 - MD RELAY, T OPR XXXX F (4 calls)
-

**Operators
Identified as
"Trainee"**

Operators in training are required to identify themselves to both parties. Four hundred fifty-five calls were identified with a "T" associated with the operator number. Twenty-five calls (11 operators) identified themselves to the voice person as a trainee.

**Operators
Providing ASL
Transliteration**

Twenty-four scripts (228 calls) provided operators with the opportunity to make grammatical changes to the TTY users typed messages. Operators made all or most of the changes on 175 calls (76.8%). Operators made no grammatical changes on 29 calls and inappropriate changes on 24 calls. Some examples of inappropriate changes include:

NOW IT IS WITH MY EARTHLINK WHEN I TRY TO OPEN
ATTACHMENT I SEE MESSAGE OE HAS REMOVED ACCESS TO
UNSAFE ATTACHMENT IN YOUR MAIL ANY IDEAS GA

- Five out of 10 operators did not voice "OE". Four operators omitted "OE", one changed "OE" to "it". The voice person asked three operators if they were reading exactly what was typed, and all three assured him they had.

GREAT PLS CHECK TO SEE YOU HAVE THE STOCK GA

- Operator voiced: "Great. Please check just to make sure you have it there so I can come and get it."

I DID NOT KNOW THAT THEY HAVE TO BE NOTIFY WITHIN 48 HRS
NEXT TIME I WILL NOT DO IT AGAIN WHEN I CALL TO CANCEL
WITHIN 24 HRS IT HAS TO BE 48 HRS TO CANCEL BECAUSE OF
TERP THANK YOU SO MUCH FOR SENDING ME THE LETTER GA

- Operator voiced: I did not know that they have to notify within 48 hours. I won't do it again. Thank you so much for sending me the letter.

Continued on next page

-
- Operator voiced: I did not know that they had to be notify within 48 hours. Next time I will not do it again. *When I called to cancel within 24 hours that's when they told me of the 48 hours because of the interpreter.* Thank you so much for sending me the letter.
 - One operator voiced this message as: "Yes. *I did call the lady at Edgewood office and told her to cancel the appointment for this morning and she say that was okay. She must have forgot.*"

PLS REDIAL AND LV MESSAGE HI JOHN M HERE I TRIED TO IM YOU BUT NO LUCK PLS CALL ME BEFORE 9 TONIGHT THANKS BYE GA

- This was a TTY to voice answering machine. Four operators failed to voice "IM" and voiced as "I tried to but no luck."

OK FINE THANKS I WRITE THE NOTE TO TEACHER DO YOU WANT ME TO GIVE YOU THE MONEY FOR SUPPER Q GA

- Operator omitted the first sentence and only voiced "Do you want me to give you the money for supper?"
-

Calls with Garbling

TTY users experienced garbling on 21 calls. Four of these calls did not show garbling on the TTY printout, however the operator asked the TTY user to repeat information that was garbled on the operator's screen. Most of the garbling was a few characters at the start of the call or the start of a typed segment. Ultratec 4425s set to turbo code were used for all calls. One user noted that the operator's typing was noticeably slower on Voice to TTY calls. It appeared that a Baudot handshake was made on these calls and turbo was established on TTY to Voice calls.

Calls with garbling are identified on the **MD4RSLTS.XLS** file with a bold date.

"All Operators Busy"

Caller encountered "All Operators Busy or "Due to an extreme weather condition in the Northeast all operators are busy" on 25 calls.

Calls with busy encountered are identified on the **MD4RSLTS.XLS** file with a bold italicized date.

**Voicing: Pace
and Inflection**

Operators were evaluated on their voicing skills including appropriate pace. Operators were rated as demonstrating appropriate voicing skills on 419 out of 462 calls rated (90.7%).

- 6 calls were rated as slow (S) or inappropriate (I) because the operator waited for the TTY user to type an entire, long message before voicing to the hearing person. One voice person waited 96 seconds before the operator began voicing while another operator waited 46 seconds before relaying the message. No status was given to the voice person, i.e. "One moment please." Or "still typing."
- 27 calls were rated as run-on (R) because the operator voiced an entire segment as one long run-on sentence with no inflection.
- 10 calls were rated as choppy (C) or awkward because the operator did not pause at the end of sentences or began voicing too soon, before a complete thought was typed, making it difficult for the voice person to follow what the TTY user was saying.

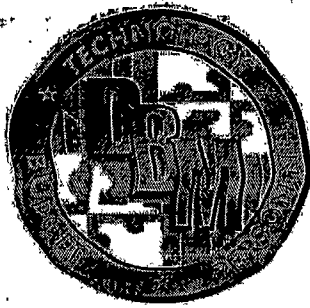
Several TTY to Voice calls were answered with, "Hello?" The TTY user responded with "CHRIS Q IT IS ME CHERYL" or "JOANNE Q THIS IS KIRSTEN" or "HI MARC Q THIS IS JENNIFER COOK" Most operators voiced Chris? , Joanne? and Marc?" as a statement rather than a question.

**General
Comments**

- On three TTY to Voice scripts, the voice person was not familiar with relay. On those calls where the operator asked if the person was familiar with relay, the standard relay explanation was given. Two operators engaged in a side conversation with the voice person during the call when they realized the voice person did not understand relay.
- A common TTY abbreviation for interpreter, "terp", was voiced as "terp" to the voice person.
- When the voice person spoke in third person, most operators typed in third person rather than changing to first person. This is an improvement over the first testing.
- Operators sometimes got involved in the conversation by responding to a question directed to the other person instead of relaying the question.

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-
- On script 15, the voice person verifies an e-mail address given by the TTY caller. Instead of relaying what the voice person said to the TTY, 4 operators confirmed that the address was correct.
 - Operator asked the voice person to spell "Weymouth" but typed "Wetihmust" to the TTY caller. The TTY replied, "IS THIS DR WEYMOUTHS OFC Q GA", the operator did not voice the question, but replied with "YES GA"
 - The name "Fallon" was used twice in script 17. The operator asked the voice person for the correct spelling, but typed it as "Salen". The second time the operator typed "Salen" for "Fallon", the TTY asked for clarification, "WHAT IS SALEN Q DO YOU MEAN FALLON Q". The operator did not relay this question but responded with "YES GA"
 - On script 16, the voice person is responding to several questions asked by the TTY caller. Part of the responds was. "Now she also asked about contacting the interpreter?" Three operators failed to type this to the TTY callers and responded to the voice person's question themselves.
 - Several operators interjected their personal comments and questions during calls.
 - One operator become involved throughout the call:
 - Well, OE is outlook express. (Opr: Oh, I didn't know that. Hmmm)
 - OE HAS REMOVED ACCESS TO UNSAFE ATTACHMENTS IN YOU MAIL (Opr: I wonder what it meant by unsafe? Does that mean a virus?)
 - Is your virus protection software up to date? (Opr: Good question!)
 - TTY: DO YOU SELL THOSE MATTRESS Q GA Vce: Yes we do Opr: And how much are they? Go ahead
 - On script 12, the voice person asked "I have a question before I hang up, then I'll sign off. I wanted to ask how do I call the relay when I want to talk to Mrs. Randolph if I can't get through. For instance, if I'm calling to confirm an appointment, I have trouble getting through the relay unless one of the children answers the phone." The operator typed "I AVE A QUESTION BEFORE I HANG UP AND THEN ILL SIGN OFF I WANTED TO ASK HOW TO DO I CAL LTEH RLELAY (HUNG UP) GA OR SK"
-



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T. ELOISE FOSTER
Secretary

THOMAS K. LEE
Deputy Secretary

December 17, 2002

Ms. Jenifer Simpson
Consumer Inquiries & Complaints Division
Consumer & Governmental Affairs Bureau
FCC
445 Twelfth Street, S.W.
Washington, DC 20554

Reference: FCC No. 02-N83298, Mr. Al Sonnenstrahl

Dear Ms. Simpson:

Thank you for allowing Maryland Relay to respond to the complaint registered with the FCC by Mr. Alfred Sonnenstrahl.

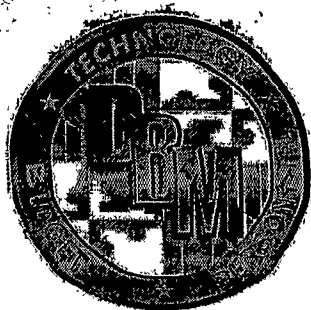
In your letter to Maryland Relay regarding this complaint, you stated that, "*Mr. Sonnenstrahl makes a specific allegation involving the federal mandatory minimum requirements for operational standards for communications assistants (CAs). See § 64.604 (a)(1).*"

His allegation involves the wpm typing speed requirement for CAs to effectively meet the specialized communications needs of individuals with hearing and speech disabilities."

Mr. Sonnenstrahl's email to the FCC stated, "*I called 800-735-2258 (Maryland Relay) to make a toll-free call today, Monday, October 28, 2002 at about 8:30 pm, from 301-770-7555. CA1284 handled the call. This CA's typing speed appears to be much slower than required 60 wpm.*"

It will be greatly appreciated if you could investigate and improve the Center's typing speed."

The operator in question tested at a wpm rate of over 60 WPM according to the response we received from AT&T and thus met the minimum typing requirement as set forth by the FCC. Mr. Sonnenstrahl



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Which again, exceeds the FCC minimum typing speed of 60 wpm. We realize that this average typing speed is lower than Maryland users had in the past with the provider that served our State for over 11 years. However, all 130 operators at the Maryland Center are new. The RFP evaluation committee (made up of Maryland Relay Users) realized that, with an entire pool of new operators, it would require time to hire, train, and attain typing speeds realized by the previous provider. It was the decision of the evaluation team that access to more functionally equivalent capabilities, such as passing information directly to 9-1-1 emergency centers, outweighed the temporary slower typing speeds.

Every effort is being made to bring the pool of new operators up to previous Maryland performance levels. These efforts include, but are not limited to, practice computers and software in a separate training area and monetary reward for increased performance.

Please share this complaint and Maryland Relay's resolution/comments with the appropriate policy personnel at the FCC.

If you have any additional questions, please do not hesitate to call me at 410-767-5891(V/TTY) or 1-800-552-7724 (V/TTY).

Sincerely,

Brenda Kelly-Frey, Director
MD Relay

Cc: Mr. Al Sonnenstrahl
Missy Devlin, AT&T
Pam Stewart, DBM/TAM



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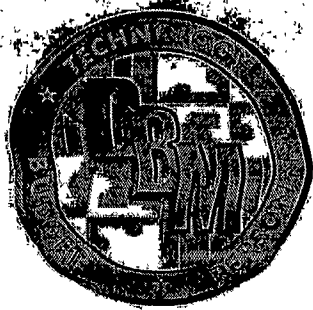
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